DATE: October 2, 2000 File Code: 4560-1

TO: Dean Packard - SCR/Poynette

FROM: Kristin Hart - SCRAM

SUBJECT: Summary of Public Hearing and Response to Comments Received on the Draft Air Pollution Control Operation Permit for Example 3.

A hearing was held to accept public comments concerning Example 3's draft Air Pollution Control Operation Permit to operate their existing facility and on a variance from Lowest Achievable Emission Rate (LAER) requirements for emissions of benzene. On May 10, 2000, DNR made a preliminary determination to approve the permit and the variance.

No public comments were received prior to the hearing. Eleven people made oral statements at the hearing. Three written statements were received at the hearing. A request was made at the hearing to extend the comment period to allow more people to make written comments. DNR granted this request and the comment period was extended until July 7, 2000. Twenty-eight additional written comments were received during this time and 4 statements were left on voice mail. In total, 45 different people commented either in writing, by email, by phone, or during the hearing.

Comment Summary and Response

1. **Comment**: I am opposed to the variance allowing Example 3 to increase their benzene emissions.

Response: This was the most common comment that was received and it is important to understand that *this permit does not allow Example 3 to increase its benzene emissions*.

The Air Management Program has two types of permits that it can issue to facilities like Example 3: construction permits and operation permits. Facilities must be evaluated for a construction permit before they can change their operations in any way that would increase emissions. The operation permit program was developed as a result of the 1990 amendments to the Clean Air Act. This program requires all large facilities, as they exist today, to obtain operation permits from DNR.

Example 3 is not proposing any increase in benzene emissions. The operation permit is for their existing operations. The draft operation permit contains emission limits and other requirements that are either carried forward from previously issued construction permits or are applicable to the facility pursuant to Wisconsin's air pollution rules.

2. **Comment**: Why would the DNR grant a variance to allow Example 3 to exceed the limit of 300 pounds per year to more than 50,000 pounds per year? Why is Example 3being allowed to emit more than 1000 times the legal limit?

Response: *300 pounds of benzene per year is not the legal limit for benzene emissions.* This was another very common comment/question and comes from a misunderstanding of ch. NR 445, Wis. Adm. Code, Control of Hazardous Air Pollutants. Table 3 of this chapter lists all the regulated carcinogens with a corresponding threshold value. For benzene, the threshold value

is 300 pounds per year. If a facility's actual emissions of a known or suspected carcinogen are greater than the corresponding threshold value, the facility must control emissions to the applicable limitation. If actual emissions are less than the threshold value, the Hazardous Air Pollutant Rule does *not* apply.

It is the permit writer's responsibility to determine the actual emissions from the entire facility and compare them to the threshold value. In Example 3's case, it was determined that actual emissions of benzene are above the threshold value, so the applicable limitation is the Lowest Achievable Emission Rate (LAER.) LAER does not consider economics and only looks at how the current technology can reduce or eliminate emissions.

For facilities who believe that the application of LAER would be economically infeasible, the Hazardous Air Pollutant Rule provides them with the ability to request a variance from LAER. DNR *must* grant a variance if a facility can satisfy three criteria: first, that the application of LAER is economically infeasible, second, that the facility will control the emissions using Best Available Control Technology (BACT) and third, that the emissions, after being controlled using BACT, do not cause significant harm to the environment or public health. Example 3provided information to address these three criteria, and DNR made a preliminary determination that the criteria had been met and the variance should be granted.

3. **Comment**: What kind of variances has Example 3 received in the past? What variances have been granted to other facilities in the past?

Response: Example 3 received a similar variance from LAER for benzene emissions when they obtained a construction permit for a new shakeout operation in 1995. Because this was a construction permit, the variance covered only the specific operations included in the construction permit. As required by state law, this 1995 variance was granted only after a public comment period and public hearing were held.

Under the 1995 variance, Example 3 was required to perform a series of tests and to try to help us better quantify benzene emissions for the foundry industry. The foundry was also required to do pilot studies to help come up with cost effective methods to reduce benzene emissions from the foundry industry as a whole.

DNR has granted a number of other variances for benzene emissions from foundries across the state. In the mid-90's, these variances all required testing and pilot studies to be conducted and these have been used as the foundation for the new system of benzene reductions that we are currently proposing to implement through the operation permit program. (See response to comment 4., for information on new system of benzene reductions.)

4. **Comment**: Shouldn't the DNR be trying to get the foundry to lower its benzene emissions? What is the DNR doing to decrease benzene emissions? What is the foundry doing to change the way to make castings and sand molds? What alternative methods of molding are being looked into?

Response: Benzene isn't used as a raw material by the foundry industry but is created as an unwanted side product when hot molten metal is poured over sand cores and into sand molds. Benzene is emitted as the molds cool and when the molds are broken up during shakeout. The extremely high temperatures of the molten metal decompose the organic binders in the sand and turns them into gases. As they cool, they are recombined into new organic compounds such as benzene. Many factors affect the amount of benzene that is created during this process including the cooling rate of the molds, the amount of organic binders contained in the

sand molds and in the cores, the temperature of the casting when shakeout occurs, and even the shape of the casting itself.

Because casting shapes are driven by the market, and cooling rates are directly related to the strength and safety of the metal product, foundries do not have much flexibility to change these variables. For this reason, DNR and foundry industry agreed that changing or limiting the amount of organic binders in sand was the best and most cost effective way to reduce and perhaps eliminate benzene emissions. Through its pilot studies, Example 3has found that they can reduce the amount of organic binder they use in their sand and still get their sand molds to perform up to standards. Example 3also is experimenting with different types of binders from Europe and use of oxidants in the sand system which may destroy the benzene as it is being formed.

The BACT requirements proposed in Example 3's operation permit require that they continue to make improvements in their sand system that lead to a greater and greater reduction in the amount of organics in their sand. They are required to test for emissions of benzene directly coming from their stacks and they are required to test their sand in two ways to evaluate their progress on reducing organics. They must also compare themselves to the rest of the foundry industry by having their test results graphed and reported on the internet.

DNR anticipates that these process improvements will greatly reduce the amount of benzene coming from the entire foundry industry in Wisconsin. There are two additional initiatives that may affect foundry emissions in the future. The DNR's Air Management Program has been selected by USEPA to work on an experimental project with the Wisconsin Cast Metals Association to manage benzene emissions using an EMS (Environmental Management System) such as those required by the international ISO 14001 rules. This project would look at how the DNR's own rule-making process can be improved and to find ways to give incentives to foundry industry that would make it economically feasible to continually work at eliminating benzene.

The US Environmental Protection Agency (EPA) is also promulgating maximum achievable control technology (MACT) standards which will affect hazardous air pollutant emissions for the iron and steel foundry industry. The foundry MACT is slated to be proposed by February of 2001.

5. **Comment**: If Example 3 is not being allowed to increase emissions, why does the permit allow so much more benzene to be emitted than they actually emit right now?

Response: Example 3 estimates their current actual emissions at 15,000 pounds of benzene per year. The permit review and risk assessment were performed on 51,000 pounds of benzene emitted per year. Since the risk assessment was performed, DNR has recalculated estimates of benzene emissions and finds that the draft permit would actually restrict emissions of benzene to 38,153 pounds per year due to monthly production limitations. This number is called the Potential to Emit for benzene. The potential to emit is defined as the maximum capacity of a piece or pieces of equipment to emit an air contaminant under its physical or operational design. Any limitation on the capacity of the equipment to emit the air contaminant is treated as part of its design if the limitation is part of a federally enforceable permit. The potential to emit is calculated assuming that a piece of equipment is operating at its design capacity 24 hours a day, 365 days per year. Many industrial facilities have actual emission which are lower than their potential, maximum emissions; this is the case for Example 3as well.

The only limitation that can be applied to benzene emissions is LAER or a variance from LAER.

There are other limitations proposed in the draft permit, such as limits on the amount of metal that Example 3 can melt. Example 3must abide by these limits to ensure that they meet the emission limits for particulate matter. These limits indirectly restrict the benzene emissions as well.

6. **Comment**: We shouldn't allow economic reasons influence our decisions when it comes to cancer risks.

Response: Chapter NR 445, Wis. Adm. Code, Control of Hazardous Air Pollutants, which allows for a variance in the face of economic infeasibility, is a product of input from many and diverse interested parties. As the rule is written now, we are required to consider a variance request when a facility shows that it is economically infeasible to apply LAER.

7. **Comment**: We weren't aware, until a few days ago, that Example 3 emitted any benzene let alone 15000 pounds a year. What other chemicals might they be emitting?

Response: It wasn't until the early to mid 1990s that anyone was aware that foundries had large emissions of organic compounds including benzene. Since 1995, DNR has been working with the foundry industry to determine exactly how much benzene and other organic compounds are emitted and how they can be reduced.

Example 3 also emits a number of other hazardous air pollutants. They have performed stack testing for acrolein and could emit up to 0.056 pounds acrolein per hour from all stacks combined. This is the maximum amount that Example 3 could possibly emit and is below the threshold value in the Hazardous Air Pollutant Rule for acrolein. When emissions are below the threshold value, the Hazardous Air Pollutant Rule does not apply and emissions of the substance can be considered safe.

Formaldehyde is another organic compound for which Example 3 has done stack testing. DNR estimates that they emit 1789 pounds of formaldehyde per year. Because formaldehyde is a suspected carcinogen the facility must apply BACT to emissions of formaldehyde.

The FIRE data base developed by USEPA lists the following chemicals that *may* be emitted by iron foundries: acrolein, aniline, arsenic, benzene, cadmium, calcium oxide, chromium, chromium VI, copper, formaldehyde, manganese, mercury, MDI, naphthalene, phenol, toluene, and xylene. USEPA has developed emission factors for these substances. Based on maximum operating rates and using these emission factors, Example 3's maximum emissions of these substances would each be less than their corresponding threshold values, therefore, emissions of these substances should not pose a risk to human health or the environment.

8. **Comment**: What is the environmental fate of benzene emissions? Is benzene in the air taken up by rain and can we be assured that this won't eventually get into our drinking water?

Response: When benzene is emitted into the air it is dispersed and its concentration gets lower and lower as it is mixed with more and more air. The highest concentration of benzene around Example 3 is estimated by air quality computer modeling to be 2.10 micrograms per cubic meter. According to information from the National Institute of Health's Hazardous Substance Data Bank, benzene will be partially degraded in photochemical reactions in the atmosphere. Since it is slightly soluble in water, some benzene may be removed from the atmosphere by rain. The concentration in the rain water would be extremely low, however and is not expected to cause ground water contamination. On soil surfaces, benzene would either evaporate back up into the atmosphere or it would biodegrade in the soil. In surface waters

benzene readily evaporates back into the atmosphere. It is also quickly biodegraded in surface waters being almost completely degraded in 90 hours.

9. **Comment**: A few years ago OSHA required that all benzene and formaldehyde be removed from schools. If these chemicals are so dangerous that they are not even allowed on school premises, how can you say that 51,000 pounds per year of benzene emitted to our air is okay?

Response: Benzene and formaldehyde are dangerous chemicals that are known and suspected carcinogens. Because the possibility of accidental exposures in high schools and junior high schools is high, proper disposal of used chemicals is expensive and difficult, and because less hazardous substitutes are readily available, OSHA felt that the best way to reduce accidental exposures to these chemicals was to remove them completely from school premises.

Unfortunately eliminating benzene and formaldehyde emissions from foundry exhausts is not easy nor inexpensive. However, the BACT requirements that DNR has proposed as part of this permit do require that the facility *continually* improve its sand molding system so as to reduce benzene and formaldehyde emissions.

10. **Comment**: I am concerned about the cancer causing agents being emitted by Example 3. I/my child/my spouse/my neighbor/many young people in this town have died or been treated for cancer. More people than is normal have cancer in this town. Will/Can a study be done or has a study ever been done to look at the cancer rates in this town?

Response: Currently DNR is not aware of any health or cancer cluster studies that have been done in the city. DNR contacted a representative of the State Department of Health and Family Services (DHFS) who said that they do not routinely perform cancer cluster studies because looking at small geographic areas is not an informative way to learn about cancer causes. This opinion is shared by the federal Centers for Disease Control (CDC), other state health departments, and is also evident by a growing consensus in the scientific literature. Cancer latency (about 15-30 years for environmental cancers), residential history, and lack of defined exposure are factors that complicate investigators ability to draw conclusions. Investigators cannot draw substantial conclusions by looking at small number of cancers in any given area. Instead, DHFS currently investigates cancer in Wisconsin by monitoring the disease across the entire State. In addition, the DHFS is looking to conduct larger epidemiologic studies involving many cases of the same cancer (for example, all brain cancers in the state over several years), such as a current collaborative study with the University of Wisconsin on breast cancer.

11. **Comment**: What about the benzene in the foundry sand that is being sent to the landfill? Can that be getting into our ground water?

Response: Landfills are regulated in Wisconsin by DNR's Waste Management Program. Currently Example 3 beneficially reuses most of the material they produce, except for small quantities that are landfilled. Their landfill is lined with a protective barrier which limits transport of chemicals contained in landfilled materials from entering the underlying groundwater. Also, the type of sand that enters the landfill from Example 3 contains bentonite which is a very fine sticky clay that allows very little water to seep through.

With respect to beneficial reuse, ch. NR 538, Wis. Adm. Code, does not require testing for benzene. Example 3's system sand falls under category 4 in NR 538, which allows the material to be used under paved surfaces. Because of the bentonite content of the sand, and the fact that the material is being placed under impervious surfaces and above the groundwater table,

the chances of leaching are low.

12. **Comment**: Some days there is more particulate matter in the air than others. I have black dust on my car. The houses in the neighborhood near Example 3 are black.

Response: The draft permit includes a compliance plan that requires Example 3 to reduce particulate matter emissions. The facility has approximately one year to propose changes to stack heights, stack locations, pollution control systems, and stack emissions rates and has another two years to actually implement those changes and provide stack testing data to show that they comply with the ambient air quality standards for particulate matter. Implementation of this compliance plan should greatly reduce the particulate matter emissions generated by the plant.

13. **Comment**: I never had asthma until I moved here 4 years ago. I, my children, many children, suffer from asthma.

Response: The prevalence of asthma has increased dramatically worldwide over the past 20 years. In Wisconsin, the occurrence of asthma has doubled in a time period when outdoor air pollution has generally decreased. The areas of Wisconsin with the highest asthma rates are the urban areas such as Milwaukee, Kenosha, Racine, and Dane Counties. Although most asthma attacks can be attributed to allergies, indoor and outdoor air pollution, cigarette smoke, cold air, exercise, and dust may also be contributing factors. Example 3's draft permit has many conditions in place that would require them to reduce emissions of particulate matter, benzene, formaldehyde, and volatile organic compounds. If this permit is issued it should result in the reduction of air pollution.

14. **Comment**: There is an elementary school close to Example 3. There is a day care center across the street from Example 3. Has the DNR looked at the impact of these emissions on the school or the day care?

Response: DNR performed air quality dispersion modeling on the air pollutants emitted from Example 3's stacks. Air quality modeling is used to predict how emissions from a stack are spread out and blown around the area of the plant. The highest concentration of benzene in the area of the plant was predicted to be 2.10 micrograms benzene per cubic meter of air. At this concentration DNR's risk assessment showed that emissions of benzene would not pose a significant risk. Actual concentrations of benzene are expected to be substantially lower than this.

For particulate matter, the draft permit includes a compliance plan that requires Example 3to control particulate matter emissions. The facility has one year to propose changes to stack heights, stack locations, pollution control systems, and stack emissions rates and has another two years to actually implement their changes and provide stack testing data to show that they comply with the ambient air quality standards for particulate matter. The ambient air quality standards for the criteria pollutants such as particulate matter are set to protect children and sensitive individuals.

15. **Comment**: How much benzene and particulate matter is being emitted throughout the state? What is the average amount of benzene and particulate matter being emitted?

Response: DNR requires industrial facilities in the state to report their emissions of benzene and particulate matter each year. This annual inventory includes only the releases from

industrial stacks, which are typically referred to as point sources. The 1999 Air Emissions Inventory shows that point sources in Wisconsin emitted 28,618 tons of particulate matter and 127 tons of benzene during that year.

Though not included in the DNR emissions inventory, there are also significant benzene and particulate matter emissions generated by non-industrial sources. These are referred to as area and mobile sources. Area sources include a wide variety of common activities including the fueling of cars with gasoline, the heating of commercial buildings with natural gas and fuel oil, the use of residential fireplaces and woodstoves, and the use of non-road fuel in equipment such as boats, lawnmowers and barbeque grills. Mobile sources include automobiles, trucks and busses.

While industrial operations are the most visible sources of benzene and particulate matter emissions, they are not the largest. Industrial operations are typically the most regulated and utilize sophisticated methods to reduce emissions. Area sources such as the small engines used by lawnmowers and snowmobiles generate large amounts of uncontrolled pollution. Industrial operations contribute 3% of the total particulate matter and less than 1% of the total benzene emissions released in Wisconsin. Area and mobile sources contribute the majority of the emissions of these pollutants.

16. **Comment**: What is the LD50 of benzene?

Response: The effects of exposure to chemicals in the air are generally split into two categories, acute and chronic. Acute exposure to high concentrations of a chemical over a short period of time may result in noticeable effects such as irritation of the skin or eyes within a relatively short period of time. Chronic exposure to low concentrations of a chemical over a long period of time may result in noticeable effects in the distant future, such as the development of cancers.

The LD50 stands for lethal dose of 50% of the test subjects and refers to acute toxicity studies done for chemicals, usually with rats or rabbits as the test subjects. A Material Safety Data Sheet for Benzene listed the LD50 for inhalation in rats as 10,000 parts per million for 7 hours. This is approximately equal to 30,000 milligrams per cubic meter or 30,000,000 micrograms per cubic meter.

Another measure of acute toxicity is the Threshold Limit Value, or TLV, which refers to the concentration of a substance in air above which an adult worker, exposed for 8 hours a day, 40 hours per week may begin to show signs of toxicity. The *Documentation of the Threshold Limit Values and Biological Exposure Indices, Fifth Edition*, put out by the American Conference of Governmental Industrial Hygienists lists a threshold limit value for benzene of 30,000 micrograms per cubic meter.

It is unknown if there is a safe level of a carcinogen such as benzene. Evaluation of the low concentrations of benzene in the ambient air typically focuses on the chronic exposure effects such as cancer. Risk assessment is used to estimate the increased risk of developing cancer due to long-term exposure to low concentrations. The maximum exposure of benzene from Example 3 is expected to be 2.10 micrograms per cubic meter.

17. **Comment**: What is risk assessment and does it take into account effects on children?

Response: Risk assessment is a two tiered process. First, emission rates in pounds per hour are estimated for each stack and computer modeling is used to translate those rates into

concentrations. Second, a cancer risk analysis is performed using the maximum concentration.

For cancer risk analyses, the assumptions used are that a person weighing 70 kilograms lives at the point of the highest concentration of benzene for 70 years and breathes 20 m^3 of air per day, 365 days per year. The risk estimated in this analysis represents the highest likely risk under the assumed conditions. The actual risk (using the assumptions) could be lower and even approach zero, but because the way the mathematical models work, there is no way of telling what the actual risk is. It can only be stated that the "true risk" is between zero and the upper bound value estimated in the mathematical model.

Most health scientists recognize that children are a unique group to consider. However, there is only data for a few substances (e.g., lead) that take the differences into account from the standpoint of defining a safe level in a child vs. adult.

For the vast majority of pollutants, there is not enough scientific data to develop separate standards for children and adults. In addition, for carcinogens, the common assumption is that cancer risk is based on a lifetime of exposure (70 years.)

18. **Comment**: Has there been a study on the risk to Example 3employees?

Response: Example 3. is required to conduct periodic monitoring of the workplace air to assure compliance with occupational health standards. According to the Plant Engineer, no measurements above the occupational standards have ever been found. Measurements for benzene within the foundry have been non-detectable, or too low to measure.

19. **Comment**: I would like DNR to look into the risk to employees of the business to the east of Example 3who may be exposed to benzene by having it enter their buildings through ductwork, air conditioning uptakes, etc. Can DNR put special conditions in the variance to allow for new information on health risks to employees of these businesses. Has the DNR ever granted any conditional variances?

Response: The risk assessment performed by DNR in its analysis for Example 3's permit showed that the increased risk of cancer due to the benzene emissions was 16.4 in a million. For cancer risk analysis, the assumptions used are that a person weighing 70 kilograms lives at the point of highest concentration for 70 years and breathes 20 m^3 of air per day, 365 days per year. The risk estimated in this analysis represents the highest likely risk under the assumed conditions. The actual risk (using the assumptions) could be lower and even approach zero, but because the way the mathematical models work, there is no way of telling what the actual risk is. It can only be stated that the "true risk" is between zero and the upper bound value estimated in the mathematical model.

The area of maximum impact was estimated to be to the northeast of the foundry in a residential area. The employees of the businesses to the east of Example 3 would, therefore, be on average exposed to less than the maximum concentrations. Also, they would be exposed for only the 40 hr work week. OSHA regulates indoor air pollution and has recently set a new, stricter limit of 1 part per million for 8 hours of benzene exposure and a short term limit of 5 ppm for 15 minutes of exposure. This is approximately equal to 3000 micrograms benzene per cubic meter of air for 8 hours and 15,000 micrograms benzene per cubic meter of air for 15 minutes. The very worst case emissions from Example 3 resulted in a maximum concentration of 2.10 micrograms of benzene per cubic meter of air. So even if all of this worst case air could be sucked into a workplace, it still would meet OSHA standards for Occupational Health and

Worker Safety.

As for granting conditional variances, the draft permit does contain conditions which are part of the variance and with which Example 3 must comply. All variances granted under s. NR 445.05(8), Wis. Adm. Code, are valid for five years after which time DNR must review the variance. Following its review and the opportunity for public comment and hearing, DNR can modify, extend, or rescind the variance.

20. **Comment**: There are terrible odors coming from the plant especially when the wind is blowing right. What will the DNR do about the terrible odors coming from Example 3?

Response: Though odors can come from a variety of foundry operations, much of the odor is probably a result of the organic compounds emitted during pouring, cooling, and shakeout of castings. The BACT requirements for reducing benzene emissions from the foundry will also reduce organic compound emissions in general and, may help reduce odors. The facility's compliance plan for controlling particulate matter may also help reduce odors by reducing the organics that are emitted as tiny droplets or by reducing the emission of organics that stick to dust particles.

It is also important for DNR to know about odor problems when they occur. The case file for Example 3 contains only 2 odor complaints in the past five years. If a citizen has an odor complaint he/she should notify DNR's Mike Sloat at Devil's Lake State Park, (608)355-0811.

21. **Comment**: Example 3 is very noisy. What will the DNR do about the noise coming from the foundry?

Response: DNR does not regulate noise pollution. It may be possible to address noise through a local ordinance.

22. **Comment**: Two years ago there were brown spots on the snow. Was there a problem at the foundry then?

Response: According to representatives from Example 3, the brown spots may have been due to a malfunction in a control device on their cupola. In the spring of 1998, Example 3 replaced an old control device called an electrostatic precipitator (ESP) on their cupola with a new, more efficient baghouse. The ESP worked by building up a positive static electrical charge on the dust particles and them pulling them out of the air stream with negatively charged plates. Example 3 reports that they had some trouble with the ESP in the year before they replaced it. The new baghouse works a little like a vacuum cleaner where dust is pulled through many long tubular bags which filter out the particulate matter. The baghouse has worked much better than the ESP and hasn't had any maintenance problems in the two years that it has been operating.

Again, to properly assess whether particulate matter fallout is from the foundry, DNR must get timely information on these problems. It would be particularly helpful if weather conditions like wind speed and direction could be noted and the time of any episodes either of odor or particulate matter emissions. Mike Sloat at Devil's Lake State Park is the contact person for air problems associated with Example 3. His telephone number is (608)355-0811.

23. **Comment**: DNR should write legislation that requires all foundries to decrease their benzene emissions.

Response: Chapter NR 445, Wis. Adm. Code, Control of Hazardous Air Pollutants, requires that any foundry which emits more than 300 pounds per year of benzene apply the Lowest Achievable Emission Rate (LAER) or request a variance. The variance requirements in Example 3's draft permit would require it to submit stack test data and data concerning the organic content of their sand systems. Within the next five years we should have a better understanding of the causes of benzene emissions and how well foundries are doing at reducing them.

In addition to the existing State Hazardous Air Pollutant Rule, the Federal Government will be promulgating maximum achievable control technology (MACT) standards which would affect hazardous air pollutant emissions for the iron and steel foundry industry. The foundry MACT is slated to be proposed by February of 2001.

DNR is currently considering revisions to its Hazardous Air Pollutant Rule as well. DNR welcomes citizen participation in its rule writing. The DNR contacts for this area are Jeff Myers (608)266-2879, and Andy Stewart (608)266-5499. You can also visit the Air Management Program Calendar of Events at DNR's website http://www.dnr.state.wi.us/org/aw/air/hot/eventscal.htm. This site contains meeting minutes, public hearing dates, meeting times, etc., on a variety of air program issues including hazardous air pollutants.

Finally, the Air Management Program is participating in an EPA initiative to use environmental management systems in state and local government. Environmental Management Systems are used to assist organizations in integrating environmental protection with all other management requirements in place in their corporate structure. The Air Management Program has proposed using this type of management system on a model company whose business is continuously reducing and managing benzene emissions from foundry operations. The Wisconsin Cast Metals Association and several state foundries are willing partners in this project. Input from the public will be essential to its success.

24. **Comment**: DNR should hold hearings during times when people can attend them.

Response: DNR normally holds hearings during business hours because these are our regular work hours and because the public, handicapped accessible buildings that we use for hearings are open and available. DNR has occasionally held public hearings in the evenings, usually when specifically requested. DNR has compared attendance at daytime versus evening hearings and has found that whether hearings are held during the day or at night has little impact on the number of people attending the hearings. If people are unable to attend hearings, they can always submit written comments to DNR which have the same weight as any oral statement presented at a hearing.

25. **Comment**: Have there ever been unannounced inspections done at the facility.

Response: The air pollution compliance inspector for this facility drives by Example 3at least twice a day. He generally looks at the condition of the stacks and looks for any problem odors. He has also stopped by unannounced on several occasions when his drive-by observations indicated that stack emissions or odors might be unusually high. Inspectors generally do not try and do full blown inspections unannounced because of the need to see equipment when it is operating and the need to have staff on hand to accompany an inspector through the plant.